The birthday effect in college athletics

Previous studies have noted elite athletes worldwide in sports including ice hockey, soccer, tennis and baseball have birth dates that cluster in certain periods of the year. It is believed this occurs because the oldest children in each grade or youth sports age group are more likely to be deemed “talented” than their less physically and/or emotionally developed peers, and are subsequently given access to enhanced coaching, training and competition.

Do we see any evidence that this effect persists into college? Yes, in certain sports. The birthday effect is more pronounced for men than women, and is especially conspicuous in men’s and women’s ice hockey, men’s tennis, baseball and softball. In each of those sports, we see higher proportions of birthdays just after traditional youth system age cutoffs (these are the oldest children in their youth sports age groups).

In a number of other men’s sports (for example, football and basketball), the effects appear smaller but favor those who are likely to be oldest at their grade level (school entry cutoff dates are in/around September in a majority of states).

This issue is not unique to athletics. Advantages may accrue academically for older children within a grade-level, and recent research has shown that children (especially boys) from economically advantaged families are most likely to redshirt their kindergartners to ensure they will not be the youngest students in their grade (see Bassok & Reardon, 2013).

Notes: Little League baseball’s birthday cutoff was August 1 when this cohort of players entered that system, but changed to May 1 several years ago. Population birthday data from Centers for Disease Control (CDC) for all 1993 U.S. births (similar age as student-athletes in this analysis). * Graphs show birth month data for 2011-12 NCAA Division I first-year student-athletes in comparison to the general U.S. population.

For more information, visit www.ncaa.org/research.